

A SUPPORTING ASSEMBLY FOR A LOCK OF A MOTOR VEHICLE, AND  
METHOD FOR FABRICATION OF SAID ASSEMBLY

TECHNICAL FIELD

5 The present invention relates to a supporting assembly for a lock of a motor vehicle and to the method for fabricating said assembly.

BACKGROUND ART

As is known, a closing system for a door of a motor  
10 vehicle comprises a lock mounted on the door and a lock striker mounted in a fixed portion of the bodywork in the proximity of the opening of the door itself (or, more rarely, vice versa).

The lock basically comprises a closing mechanism  
15 designed to couple, in a releasable way, with the lock striker so as to obtain a relative blocking between the lock and the lock striker itself when the door is closed, and a lever-type actuating assembly, which can be connected to the manual-control elements associated  
20 to the door, such as, for instance, the internal and external handles, and which is designed to interact with the closing mechanism to control opening thereof.

The closing mechanism and the actuating assembly are normally mounted on a supporting assembly, which is,  
25 in turn, designed for being rigidly fixed to the corresponding door of the motor vehicle.

REPLACED BY  
ART 34 AMDT.

duration of the assembly operations and the greater the deviation between the design dimensional values of the assembly to be made and the effective dimensional values of the assembly obtained, the said effective dimensional values suffering from inevitable play due to assembly between the components themselves.

#### DISCLOSURE OF INVENTION

The purpose of the present invention is to provide a supporting assembly for a lock of a motor vehicle, which will enable the drawbacks linked to known supporting assemblies, as specified above, to be overcome.

According to the present invention, a supporting assembly for a lock of a motor vehicle is provided, said lock including a plurality of mobile members hinged to corresponding pins, the aforesaid supporting assembly comprising a shell made of plastic material, which defines a housing for at least one part of said mobile members of said lock, and at least one metal element, which supports at least a part of said pins, said supporting assembly being characterized in that said shell, which is made of plastic material, is co-moulded on said metal element.

The present invention further relates to a method for fabrication of a supporting assembly for a lock of a motor vehicle, said lock comprising a plurality of

**REPLACED BY  
ART 34 AMDT.**

mobile members hinged to corresponding pins, the  
aforesaid supporting assembly comprising a shell made of  
plastic material, which defines a housing for at least  
one part of said mobile members of said lock, and at  
5 least one metal element, which supports at least a part  
of said pins, said method being characterized in that it  
comprises the step of co-moulding said shell made of  
plastic material on said metal element.

BRIEF DESCRIPTION OF THE DRAWINGS

10 For a better understanding of the present  
invention, there now follows a description of a  
preferred embodiment, provided purely by way of non-  
limiting example, and with reference to the attached  
drawings, in which:

15 - Figures 1 and 2 are views, from opposite sides  
and with parts removed for reasons of clarity, of a lock  
for a motor vehicle, which comprises a supporting  
assembly built according to the present invention;

- Figure 3 is an exploded perspective view, at an  
20 enlarged scale, of the supporting assembly illustrated  
in Figure 1;

- Figure 4 is a perspective view, at an enlarged  
scale, of a component of the supporting assembly  
illustrated in Figure 1; and

25 - Figure 5 is a perspective view of a metal plate,  
starting from which there is made the component of

REPLACED BY  
ART 34 AMDT

## CLAIMS

1. A supporting assembly (6) for a lock (2) of a motor vehicle, said lock (2) including a plurality of mobile members (15, 16, 22, 27, 28) hinged to corresponding pins (17, 18), the aforesaid supporting assembly (6) comprising a shell (7) made of plastic material, which defines a housing for at least one part of said mobile members (15, 16) of said lock (2), and at least one metal element (8), which supports at least a part of said pins (17, 18), said supporting assembly (6) being characterized in that said shell (7), which is made of plastic material, is co-moulded on said metal element (8).

2. The assembly according to Claim 1, characterized in that it comprises a seal gasket (43) co-moulded on an edge (42) of said shell (7) made of plastic material.

3. The assembly according to Claim 1 or Claim 2, characterized in that said metal element (8) is a plate co-moulded on a face of said shell (7) made of plastic material.

4. The assembly according to Claim 3, characterized in that it comprises a metal element (9) fixed on said shell (7) on the opposite side of said co-moulded metal element (8).

5. A method for fabricating a supporting assembly

REPLACED BY  
ART 34 AMDT.

(6) for a lock (2) of a motor vehicle, said lock (2) comprising a plurality of mobile members (15, 16, 22, 27, 28) hinged to corresponding pins (17, 18), and said supporting assembly (6) comprising a shell (7) made of plastic material, which defines a housing (10) for at least one part of said mobile members (15, 16) of said lock (2), and at least one metal element (8), which supports at least a part of said pins (17, 18), said method being characterized in that it comprises the step of co-moulding said shell (7) made of plastic material on said metal element (8).

6. The method according to Claim 5, characterized in that it further comprises the step of co-moulding a seal gasket (43) on an edge (42) of said shell (7) made of plastic material.

7. A lock (2) for a motor vehicle comprising supporting assembly (6) and a plurality of mobile members (15, 16, 22, 27, 28) hinged to corresponding pins (17, 18) carried by said supporting assembly (6), said lock being characterized in that said supporting assembly (6) is an assembly according to any one of the preceding claims.

REPLACED BY  
ART 34 AMDT